

Low Carbon London

Action for Green Homes



Now is the time for action – and London leads the way

The jury is no longer out on climate change. The IPCC (Intergovernmental Panel on Climate Change) report published on 17 November 2007 states, as the unequivocal view of the world's scientists, that: climate change is happening; a lot of it is due to human activity; and it could get much worse.

But it will only do that if action is not taken, swiftly. And there is plenty of good news. Technologies that can make a real difference are already available, and constantly being improved.

“We need a new ethic by which every human being realises the importance of the challenge we are facing and starts to take action through changes in lifestyle and attitude.”

Rajendra Pachauri, Chairman,
Intergovernmental Panel on Climate Change

What's needed now is action, by individuals, businesses and government organisations.

London is leading the way among the world's cities, turning aspirations into targets, and policies into action. The Mayor's Climate Change Action Plan, “Action Today to Protect Tomorrow” (published in February 2007), describes a portfolio of measures. These range from encouraging large financial institutions to support carbon trading and investment technologies, and ensuring that state of the art scientific and technical research facilities are in place to meet the needs of the future, to creating the conditions and services that will enable individuals, businesses and government to play their part in reducing London's carbon dioxide emissions from the current 44 million tonnes per year (excluding aviation) to a target of 60% below 1990 levels by 2025.

As part of its contribution to delivering the Mayor's Action Plan, the London Development Agency has developed three Programmes – Green Homes, Green Organisations, and Green Construction. Consultancy Arthur D. Little is playing a strategic and technical advisory role in all three, drawing on its unique combination of legacies in both technology and innovation management and environmental sustainability and risk management.

The Green Organisations programme is designed to guide and assist London's businesses and other organisations in their efforts to reduce their carbon emissions.

Green Construction centres on supporting London's building sector to play its own part in reducing emissions.

This publication outlines key features of the Green Homes programme.

“Doing nothing isn't an option. What we're providing is an easier route for everyone to take action, whatever their situation, budget and goals.”

Helen Keenan, Director of London Development Agency's Environment and Climate Change Programme

Green Homes – realism, not idealism

The Green Homes programme is designed to help each individual or family in their own personal situation. The emphasis throughout is on practical solutions, not on forcing people to conform to someone else's grand ideal.

In the Green Homes programme – as in Green Organisations and Green Construction – the focus is on improving from whatever your current position is, reducing your carbon emissions without compromising on quality of life or profitability of business.

“If every London household replaced all their remaining standard bulbs with energy saving light bulbs, we could save 480,000 tonnes of carbon dioxide a year, and reduce our bills by £135 million.”

A demonstration of Green Homes principles in practice has been constructed at No. 1 Lower Carbon Drive, an exhibition space in the form of a Victorian house on the south-east corner of Trafalgar Square. The house is open to the public. Visitors receive concrete information and practical support to help them make a difference: whatever their budget, the age and condition of their home; whether they are home owners or renting.

What's in store for visitors to No. 1 Lower Carbon Drive

The house has been laid out as an exhibition of high- and low-technology ways in which Londoners can alter their homes and/or their domestic lifestyles to reduce the city's carbon emissions.

The wide range of exhibits on show is grouped into six themed zones. The zones cover: energy, insulation, water, recycling, ventilation, and appliances. Key exhibits include: 'Mythbusters'; an intelligent mains controller; and different glazing options (double, secondary, complete replacement window with double glazing). Also on show are solar water heating and solar photovoltaics, lower carbon (Energy Saving Recommended) household appliances, internal and external wall insulation, and more.

The new Green Homes Concierge Service is another important feature of No. 1 Lower Carbon Drive. Users of this service, for a subsidised fee, can have a carbon audit carried out on their home. They will receive recommendations on how they can make improvements to their domestic carbon footprint. And they can also gain support to carry out those recommendations, e.g. being put in contact with recommended suppliers of green materials and services.

“The simple message is this: to tackle climate change you do not have to reduce your quality of life, but you do have to change the way you live.”

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A unique model

In contrast with many green projects, which have focussed on new-build housing developments where green measures can be incorporated from day one of the design stage, London's Green Homes programme is intended to give practical help to **all** Londoners.

Hence its major focus on refurbishing property and revising habits, rather than rebuilding; and also its value as a model for other cities across the UK and beyond.

London's housing stock, with its many Victorian terraces and other historical enclaves, is older – and therefore more challenging, from a carbon reduction point of view – than the average among UK cities. This created the impetus for several groundbreaking achievements.

Complex choices, personal preferences

Highly complex decision-making was required to bring together the best technologies and options for demonstration at No. 1 Lower Carbon Drive. The overriding priority was striking the right balance of the relevant factors: each technology was assessed for its contribution to carbon saving, its appropriateness for London, and its cost effectiveness and ease of implementation.

The likelihood of the programme's success is increased by presenting people with choices to suit their own needs and circumstances. As part of its strategic and technical input into the programme, Arthur D. Little helped to establish what sort of choices might be relevant and attractive to Londoners –

based on earlier work for the London Development Agency, existing research (e.g. the Climate Change Action Plan), and an examination of which technologies have already been used for this type of development elsewhere.

The house includes information comparing the cost effectiveness, carbon dioxide reduction impact and ease of use of each technology. This information is presented to visitors on a set of "Carbon Cutting Cards": visitors collect cards about the technologies that interest them as they browse through the exhibition, and then have an opportunity to discuss their interests in more detail with a team of experts on hand to advise. This accessible approach to informing visitors gives maximum encouragement to find out more and take action.

"This demonstration project is truly exciting: a unique set of achievements, progressed at speed, and with significant potential to help address the carbon challenge – not only in London, but in cities worldwide. It is an eloquent expression of both London's dynamism and the power of technology."

Richard Clarke, Global Leader,
Sustainability and Risk Practice, Arthur D. Little

Beginning of a new era

The opening of No. 1 Lower Carbon Drive demonstrates what is achievable when ambition and aspiration are fuelled by expertise and encouragement at the highest level.

Arthur D. Little has been the LDA's strategic and technical partner from the outset of this project through to the implementation. The experiences, successes and learnings of the programme's development will be shared with other cities in the C40 coalition of the world's largest cities committed to tackling climate change; and with other UK cities, regional development authorities and central government.

London is pressing ahead to achieve some very stretching targets – 3 million tonnes of carbon to be saved by the Green Homes and Green Organisations programmes alone.

“If we all do our bit, we will make it happen.”

Helen Keenan, Director of London Development Agency's Environment and Climate Change Programme

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Visit: www.londonclimatechange.gov.uk



No 1 Lower Carbon Drive

The house is being opened by the London Development Agency on the 4 December 2007. The house has been laid out as an exhibition of high- and low-technology ways in which Londoners can alter their homes and/or their domestic lifestyles to reduce the city's carbon emissions.

Arthur D. Little

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